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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,758	08/29/2005	Asoka Korale	CE10051EP	6727
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MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196				
EXAMINER				
HEIDER, SHANTELL LAKETA				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

Office Action Summary

Application No.

10/528,758

Applicant(s)

KORALE ET AL.

Examiner

SHANTELL HEIBER

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 11, 12, 15, 16, 18, 23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 11, 12, 15, 16, 18, 23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on August 28, 2008 have been fully considered but they are not persuasive.
2. The applicant argues that ***"EP 0 888 025 fails to disclose or suggest a resource controller allocating a first radio resource resulting in a first quality of service if the operator corresponds to a cellular communication system operator and a second radio resource resulting in different quality of service if the operator identify corresponds to a mobile virtual network operator."*** The examiner respectfully disagrees.
3. Amin discloses Fig. 1 is a partnership network such that it is owned and maintained by two service providers, service provider A and service provider B. **(Col. 3, lines 15-17)** The HLR 114 stores the subscriber profiles for all subscribers which have as their home switch MSC 110 (**resource controller**). As is well known in the art of wireless communications, when a mobile station attempts to register with an MSC, the MSC performs a database lookup to an HLR to retrieve the subscriber profile information, and that subscriber profile information is stored in a VLR while that subscriber is registered with the system. For example, when mobile station 10 attempts to register with MSC 110, it sends its electronic serial number (ESN), mobile identification number (MIN) (**operator identity**), and a registration request to MSC 110. Based on this information, MSC 110 performs a database lookup to HLR 114 to retrieve the subscriber profile information associated with mobile station 102 and stores the

retrieved subscriber profile information in VLR 112. Mobile stations 102 and 104 will then be provided with wireless service in accordance with the profile information stored in VLR 112. **(Col. 3, line 50-Col. 4, line 7 and lines 18-20)** Fig. 2, mobile station 102 is provided with service by service provider A while mobile station 104 is provided with service by service provider B **(mobile station 102 is allocated a radio resource corresponding to cellular communication system (service provider A). mobile station 104 is allocated a radio resource corresponding to cellular communication system (service provider B))**. Each service provider can provide its subscribers with customized services **(quality of service)** and features even though the two service providers share the same basic wireless infrastructure nodes. **(Col. 4, lines 36-43)** Amin further discloses the wireless telecommunications network is provided with two sets of resources, with each set being associated with one of the service providers. In this way, each service provider maintains its own set of resources and can provide service to its subscribers using its own set of resources. **(Col. 5, lines 50-55)**

4. Mashinsky discloses an operator identity corresponding to a Mobile Virtual Network Operator. **[0059]; [0082] and Figure 14**

5. Therefore, the combination of Amin and Mashinsky discloses a resource controller allocating a first radio resource resulting in a first quality of service if the operator corresponds to a cellular communication system operator and a second radio resource resulting in different quality of service if the operator identify corresponds to a mobile virtual network operator as described in applicant's claim 1.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 11, 12, 15, 16, 18, 23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amin, EP0888025 in view of Mashinsky, U.S. Publication No. 2006/0160543.

Regarding Claims 1 and 25, Amin discloses a resource management apparatus for a cellular communication system; comprising a resource controller operable to allocate a radio resource to a subscriber unit in response to an operator identity associated with a service of the subscriber unit, wherein the resource controller is operable to allocate a first radio resource resulting in a first quality of service if the operator corresponds to a cellular communication system operator (**service provider A**) and a second radio resource resulting in a different quality of service if the operator identity corresponds to a cellular communication system operator (**service provider B**). **(A wireless communication system is configured to allow for the provisioning of partitioned telecommunication service to subscribers. The wireless network is owned and maintained by two service providers, service provider A and service provider B. Each service provider can provide its subscribers with customized services and features even though the two service providers share the same basic wireless infrastructure nodes. A wireless switch contains a partition table**

which associates a service provider with each wireless terminal which has the switch as its home switch, the switch provides such services using resources associated with the service provider associated with the subscriber; See abstract, Col. 3, line 13-Col. 4, line 44 and Col. 5, lines 1-55)

Amin fails to disclose an operator identity corresponding to a Mobile Virtual Network Operator.

In a similar field of endeavor, Mashinsky discloses a method and system for dynamic spectrum management. Mashinsky further discloses an operator identity corresponding to a Mobile Virtual Network Operator. **[0059] and [0082] & Figure 14.**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for dynamic spectrum allocation and management that does not require substantial changes to the existing network architecture (Mashinsky) which allows service providers to share the basic resources of a network while allowing each service provider to customize the services and features provided to its subscribers (Amin).

Regarding Claims 2 and 26, Amin and Mashinsky disclose wherein the cellular communication system has a common radio access network resource divided into a first partition for a first operator (**service provider A**) and a second partition for a second operator (**service provider B**), and the resource controller is operable to allocate resource from the first partition if the operator identity corresponds to the first operator and from the second partition if the operator identity corresponds to the second operator. **(Amin-Col. 4, lines 45-48 and Col. 5, lines 1-31)**

Regarding Claims 3 and 27, Amin and Mashinsky disclose wherein the resource management controller comprises: control means for independently controlling at least one quality of service parameter associated with the first partition of the common radio access network resource in response to a first preference parameter of the first operator, and at least one quality of service parameter associated with the second partition of the common radio access network resource in response to a second preference parameter of the second operator. **(Amin-Col. 4, lines 36-48; Col. 5, lines 49-55 and Col. 7, lines 47-53)**

Regarding Claim 5, Amin and Mashinsky disclose wherein the control means comprise a first quality of service controller for independently controlling the at least one quality of service parameter associated with the first partition and a second quality of service controller for independently controlling the at least one quality of service parameter associated with the second partition. **(See rejection for Claim 3).**

Regarding Claim 11, Amin and Mashinsky disclose wherein the first quality of service controller comprises a first power control controller for controlling transmit powers associated with the first partition and the second quality of service controller comprises a second power control controller for controlling transmit powers associated with the second partition. **Mashinsky-[0062] and [0063].**

Regarding Claim 12, Amin and Mashinsky disclose wherein the control means is operable to control the at least one quality of service parameter associated with the first partition and the at least one quality of service parameter associated with the

second partition in response to at least one common parameter for the first and second partition. **(See rejection for Claim 3).**

Regarding Claim 15, Amin and Mashinsky disclose wherein the resource management apparatus comprises means for dynamically varying the partitioning of resource into said first and second partition. **(Amin-Col. 8, lines 1-4)**

Regarding Claim 16, Amin and Mashinsky disclose wherein the partitioning of resource into the first and second partition is in response to a resource usage in said first and second partition. **(Amin-Col. 5, lines 32-48 and Col. 6, lines 22-42)**

Regarding Claim 18, Amin and Mashinsky disclose wherein both the first and second partition comprises resource associated with equipment shared between the first and second operator. **(Amin-Col. 4, lines 36-50 and Col. 5, lines 1-31)**

Regarding Claim 23, Amin and Mashinsky disclose further comprising means for associating the operator identity to a service of a subscriber unit when initiating the service. **(Amin-Col. 5, lines 1-48)**

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTELL HEIBER whose telephone number is (571)272-0886. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. H./
Examiner, Art Unit 2617
December 5, 2008

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617